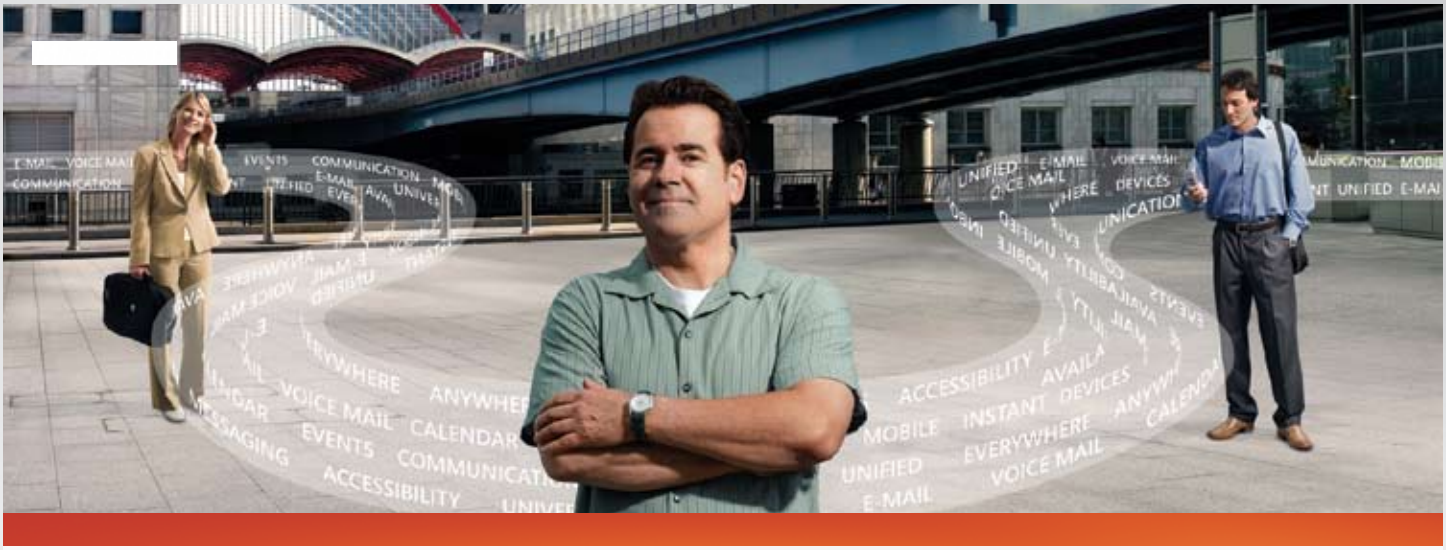


MICROSOFT EXCHANGE SERVER 2007

PRODUCT GUIDE

Microsoft® Exchange Server 2007

More and more, people throughout your company rely on e-mail to handle their mission-critical communications needs. As the demand for and use of e-mail increases, user expectations increase. People expect rich, efficient, and secure access to e-mail, calendars, attachments, contacts, and more—no matter where people are, or what type of device they are using.

But for IT professionals, who are constantly challenged to do more with less, delivering a messaging system that meets these expectations must be balanced against other requirements. Today, IT departments must contend with e-mail security threats that are wide-ranging and increasingly complex. These threats have the potential to jeopardize the stability of the business and bring communication to a standstill. In addition, time, money, and resource constraints are facts of life. As a result, IT professionals look for a messaging system that addresses both enterprise and employee needs while also being cost-effective to deploy and manage.

WHAT IS EXCHANGE SERVER 2007?

Microsoft® Exchange Server 2007 is the next version of Microsoft Exchange Server, the industry's leading server for e-mail, calendaring, and unified messaging. This release is closely aligned with the 2007 Microsoft Office system wave of products, which together deliver a best-in-class enterprise messaging and collaboration solution.

Exchange Server 2007 has been designed specifically to meet today's business and IT challenges while delivering on the capabilities demanded by mobile workforces. The enhancements we've made to this version of Exchange Server 2007 fall into three major areas:

1. Built-in protection from spam, viruses, e-mail spoofing and snooping, system downtime, and compliance risk
2. Anywhere access[1] to vital communications—such as e-mail, voice mail, and calendars—from a variety of clients and devices
3. Operational efficiency to help optimize hardworking and networking investments, and improve IT productivity

"Even when our employees are away from the office, they are able to access their calendars, e-mail messages, and documents. So wherever they are and no matter what time it is, our employees have the tools they need to make decisions quickly."

—— Yoshiyasu Iizuka, General Manager of the Information Systems Department, Nikon Corporation

WHAT'S NEW AND IMPROVED IN EXCHANGE SERVER 2007?

OPERATIONAL EFFICIENCY

Feature	New/Improved	Description
Easy and Efficient Deployments		
Server Roles	New	A modular system of five server roles reduces the time required for installation, minimizes manual configuration by the administrator, and increases security by limiting the surface area available for attack.
Exchange Best Practices Analyzer (ExBPA)	Improved	Now embedded in setup and available through the Exchange Management Console toolbox, the Exchange Best Practices Analyzer not only identifies configuration discrepancies that may lead to service outages and reliability problems, but also assists with deployment and setup.
Outlook Autodiscover	New	Configuring Microsoft Office Outlook® 2007 to connect with Exchange Server 2007 is easier than ever. If the user is logged on to the network, Exchange Server 2007 automatically configures the user's Outlook profile.
Exchange Management Pack for Microsoft Operations Manager	Improved	Manual configuration of Microsoft System Center Operations Manager is greatly reduced. Rules directly align with Exchange Server 2007 server roles, and management can be done using the Exchange Management Console or Exchange Management Shell.
Single Migration Engine	Improved	All mailbox migration tools have been combined into a single, comprehensive tool that allows administrators to perform intra- or inter-organizational migrations, minimizing complexity.
Administrator Productivity		
Exchange Management Console	Improved	An improved graphical user interface simplifies the navigation tree down to three layers of depth, with actions easily discovered through a new action pane. Management and trouble-shooting tools are integrated in the toolbox.
Exchange Management Shell	New	A new command-line interface, based on Windows PowerShell, allows administrators to automate routine and repetitive tasks.
Flexible Permission Model	Improved	Permissions become more granular and straightforward to manage. The permissions model enables a set of new, predefined administrator roles.

Scalability and Performance		
64-bit Architecture	New	As a native 64-bit application, Exchange Server can access more memory, helping ensure high performance and reliability as mailbox sizes and the number of user accounts per server increase.
Simplified Routing Topology	New	The complexity of the Exchange Server 2007 routing topology has been reduced by building on the existing Active Directory® site topology. Routing groups are no longer needed.
Exchange Management Console Toolbox	Improved	New and improved troubleshooting tools in the Exchange Management Console toolbox help diagnose and remediate performance problems, and are kept current via integration with Microsoft Update.
Extensibility		
Web Services API	New	An extensible Web services platform allows developers to embed mailbox or calendar information within line-of-business or other custom applications.
Outlook Web Access–Web Parts	Improved	Developers can easily embed Outlook Web Access (OWA) functionality into their portal applications using OWA Web Parts.

BUILT-IN PROTECTION

Feature	New/Improved	Description
Layered Anti-Spam/Antivirus Protection		
Edge Transport Server Role	New	Anti-spam filtering is available "out of the box," handled by the Edge Transport server role at the network's perimeter.
Exchange Hosted Filtering[2]	New	Operating in the Internet cloud as a hosted service, Exchange Hosted Filtering employs multilayered defenses to help block e-mail viruses, spam, and malware from reaching the organization's gateway.
Forefront Security[2] for Exchange Server	New	To augment the capabilities of the core Exchange platform, Microsoft Forefront™ Security for Exchange Server offers an additional layer of on-premise protection for both viruses and spam.
Antivirus Extensibility	Improved	Flexible antivirus extensibility allows messages to be scanned in transport as well in the mailbox store by one or more antivirus engines. In addition, inbound and outbound attachment stripping can be customized by the administrator.

Business Continuity		
Cluster Continuous Replication	New	High availability with automated failover can be achieved using continuous replication in an active/passive cluster. Data is copied from active to passive server nodes via log shipping. Shared storage is not required, so nodes can be located in separate geographical locations.
Local Continuous Replication	New	A copy of the Exchange Server 2007 database can be placed on a second disk set, where it is automatically kept up-to-date via log shipping. In the event of a disk failure or data corruption, the administrator can quickly switch to the copy database, offering an economical way to achieve high availability.
Automatic Server Updates	Improved	Patching and updating servers is automated using Microsoft Update on the Web, Windows® Update Server on-site, or Microsoft Systems Management Server.
Confidential Messaging		
Intra-organization Encryption	New	E-mail inside the organization is automatically encrypted by default from the sender's e-mail client to the recipient's e-mail client.
Automatic TLS Encryption	New	Connections between hosts that support Transport Layer Security (TLS) encryption are automatically encrypted, requiring no administrator action. Exchange Server 2007 automatically supports TLS using built-in certificates.
Compliance		
Transport Rules	New	Exchange Server 2007 allows organizations to enforce enterprise, governmental, and legal requirements through a sophisticated e-mail flow control and policy engine.
Messaging Records Management	New	With Managed Folders, users can organize messages into Outlook folders that are pre-defined by the administrator. An automated process scans these folders to retain, expire, or journal communications based on compliance requirements.
Flexible Journaling	Improved	Journaling improvements enable administrators to journal e-mail on a per-database, per-distribution list, or per-user basis. Journaling can be configured based on sender, recipient, or content.
Multi-mailbox Search	New	Content in Exchange Server 2007 mailboxes is fully indexed and searchable using a variety of criteria. Administrators can search across all mailboxes in an organization.

ANYWHERE ACCESS

Feature	New/Improved	Description
Collaboration and Productivity		
Scheduling Assistant	New	A Scheduling Assistant provides visual guidance on the best dates and times to meet, based on the schedules of invitees and resources.
Calendar Attendant	New	Server-side meeting processing means that Outlook no longer has to be running for the user's calendar to remain up-to-date. Meetings are updated without sending redundant notices, reducing inbox clutter.
Resource Booking Attendant	New	Rooms and equipment are specially marked in the Address Book so they can be browsed separately and given custom properties and permissions.
Schedulable Out of Office	New	Out-of-Office messages can be scheduled to begin and end at given dates/times. Separate messages can be set for internal and external recipients.
Improved Search	Improved	Search in Exchange Server 2007 was rewritten using Microsoft Search 3.0 advancements. Mailboxes are fully indexed by default, and indexing is substantially faster than in earlier versions of Exchange Server.
Calendar Permissions	Improved	Calendar item details can be more flexibly shared with others (for example, showing only the name of a meeting or appointment, not the full details).
Web-based Messaging		
Enhanced Outlook Web Access Experience	Improved	Outlook Web Access has been rebuilt from the ground up to provide a rich, browser-based experience with the updated look and functionality of Outlook 2007, including Scheduling Assistant, categories and flags, and search enhancements.
WebReady Document Viewing	New	A new option in Outlook Web Access converts documents (Microsoft Office Word, Excel®, PowerPoint®, and PDF) into HTML so they can be viewed even if the application that created the document is not installed on the client.

LinkAccess	New	When a user receives a link to a document on a MIcrosoft Office SharePoint® Server site or file share, Exchange Server 2007 uses LinkAccess to retrieve and display the document—no VPN or tunnel required.
Improved Security	Improved	Two-factor authentication support is improved, and administrators can require documents to be viewed as HTML for greater security on public kiosks.
Optimized Web Experience	Improved	Increased client caching reduces server roundtrips, decreasing bandwidth usage and providing an improved user experience over slow connections.
Unified Messaging		
One Inbox for E-mail, Fax, and Voice Mail	New	Exchange Server 2007 seamlessly delivers e-mail, voice mail, calendar items, and faxes into users' inboxes. This unification improves employee productivity by simplifying access to common types of communications.
Voice Mail System	New	Exchange Server 2007 can answer the telephone and record a message whenever the user's phone goes unanswered or is busy.
Fax Capability	New	Fax-receiving capabilities provide the ability to answer a fax call, receive a fax, and deliver it to the user's inbox.
Speech-enabled Auto-Attendant	New	An auto-attendant provides professional switchboard-like capabilities, with integrated speech recognition and the ability for callers to search the company directory.
Outlook Voice Access[3]	New	Users can access their Exchange Server 2007 mailboxes using any telephone, hearing their e-mail and calendar entries and taking action on them using either speech or key pad commands.
Self-service Voice Mail Support	New	Using Outlook or Outlook Web Access, users can reset their voice mail PIN, reducing a major source of help desk requests.
Consolidated Infrastructure	New	Deploying Exchange Unified Messaging allows organizations to consolidate their voice mail and e-mail infrastructures. It builds on a company's existing investments in Active Directory to provide a single management experience and integrated security policies across voice mail, e-mail, and fax.

Mobile Messaging		
Exchange ActiveSync (Direct Push)	Improved	Mobile devices that incorporate Exchange ActiveSync maintain a secure connection with the server, receiving any new or updated e-mail, calendar items, contacts, or tasks as soon as they arrive on the server.
Self-service Device Wipe	New	If a device is lost or stolen, the user can clear the contents of the mobile device or reset the device's password via Outlook Web Access.
Device Security and Management	Improved	Administrators can set per-user device policies: allowing/disallowing attachments, specifying PIN expiration, etc.
Over-the-Air Search	New	Searching from a mobile device queries the local device as well as the user's entire mailbox on the Exchange Server.
Support for Flags	New	Flags for e-mail triage are fully supported for mobile devices.
Support for HTML Messages	New	Rich HTML mail for mobile devices is supported, and replying to an e-mail will preserve the HTML formatting for all other users in the thread.
Inline Message Fetch	New	If a user clicks on a long message or attachment, the device can immediately fetch the necessary data without reloading the entire message.
Calendaring and Out of Office	Improved	The richness of calendaring capabilities on mobile devices is enhanced, allowing users to take more actions on meeting requests as well as manage Out-of-Office messages.
Mobile Document Access	New	When a user receives a link to a Windows SharePoint Services site or file share while using a mobile device, Exchange Server 2007 uses LinkAccess to retrieve and display the document—no VPN or tunnel is required.

OPERATIONAL EFFICIENCY

"There will be 1.4 billion mailboxes by the end of 2006 and that number will grow to 2.2 billion mailboxes in 2009, an average annual rate of 16%."[4]
—Radicati Group, 2005

The growing volume of e-mail messages coupled with e-mail's mission-critical role in many businesses places heavy demands on IT administrators. New tools in Exchange Server 2007 help enable IT administrators to be efficient and productive as they manage the messaging environment:

Exchange Management Console offers administrators a graphical environment with less nesting, a new action pane, and easy ways to filter large lists of objects.

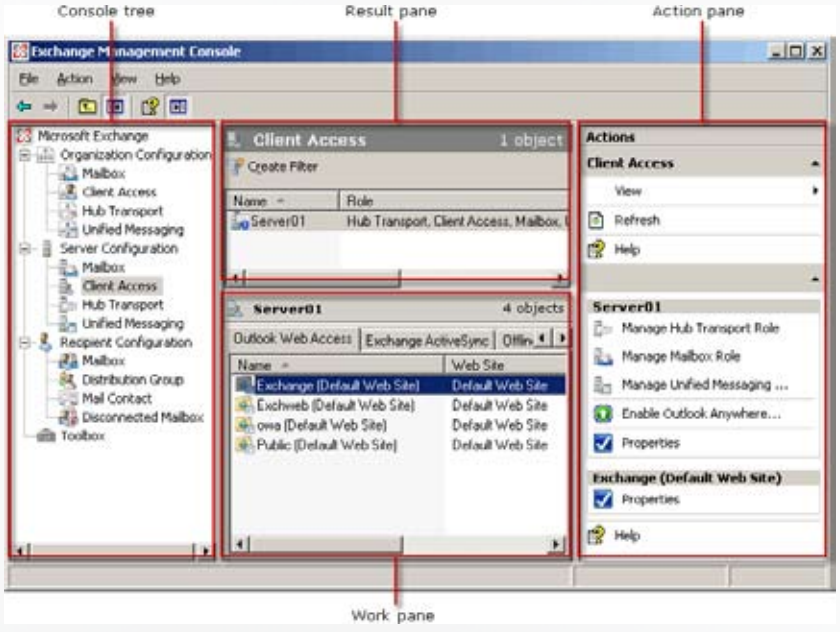
Exchange Management Shell lets administrators manage all aspects of Microsoft Exchange via a command line—making it easy to automate routine and repetitive tasks.

Outlook Autodiscover provides automatic client configuration to simplify Outlook mailbox setup, avoiding end-user confusion and reducing one of the most common helpdesk inquiries.

Server roles simplify the process of installing Exchange Server 2007, reduce the need for manual configuration, and provide a highly scalable architecture.

64-bit architecture allows organizations to increase mailbox quotas and minimize per-mailbox storage costs. Storage throughput requirements are reduced and a wider variety of storage systems can be used.

Exchange Web Services provides a new standards-based API that allows developers to readily integrate Exchange Server 2007 with line of business and service-oriented applications.



Exchange Server 2007: Exchange Management Console

BUILT-IN PROTECTION

"24% of organizations have had employee e-mail subpoenaed by courts and regulators, and another 15% of companies have gone to court to battle lawsuits triggered by employee mail."[5]
—AMA & The ePolicy Institute, 2006

Companies today face increasing spam and virus threats as well as growing regulatory and corporate compliance requirements. In an environment where organizations are focused on protection and compliance, Exchange Server 2007 delivers functionality to help maintain the security of the messaging environment:

Transport Rules allow IT administrators and compliance officers to establish and enforce regulatory or corporate policies on both internal and outbound e-mail, voice mail, and fax messages.

Built-in anti-spam technologies provided by Exchange Server 2007's new Edge Transport server role use a multi-pronged approach to block unwanted messages and provide enhanced protection against phishing attacks.

Exchange Hosted Filtering and **Forefront Security for Exchange Server**—both available with the Exchange Server 2007 Enterprise Client Access License—provide hosted and on-premise options for advanced anti-spam and antivirus protection.

Local Continuous Replication and **Cluster Continuous Replication** use log shipping technology to keep a rolling copy of an Exchange Server database. This allows fast recovery from database and server failures while reducing the need for tape backups.

Exchange Server 2007: Exchange Hosted Filtering—Administration Page

ANYWHERE ACCESS

"More than one-half of all online consumers say they check their work e-mail outside the office."[6]
—Jupiter Research, 2005

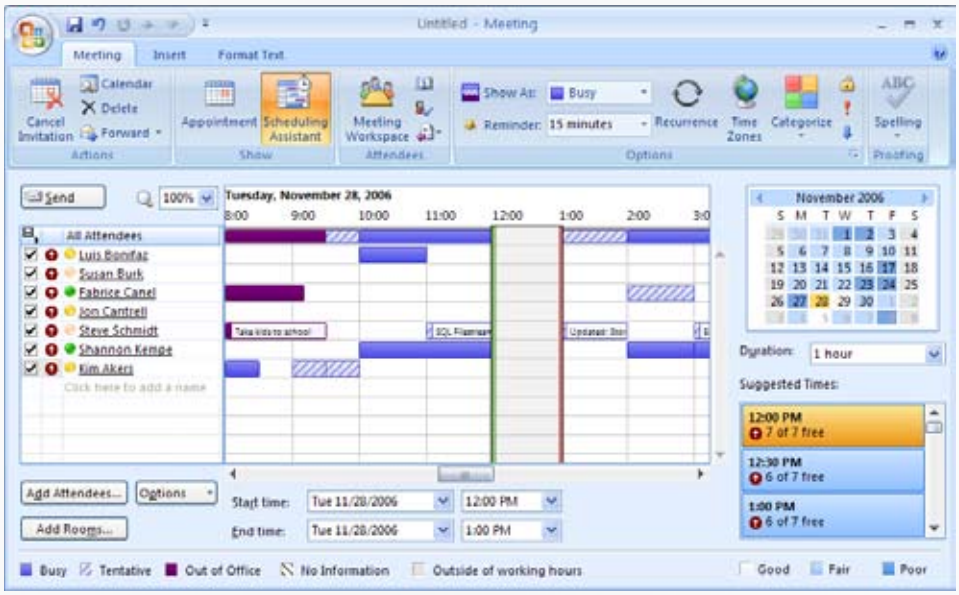
As workforces become increasingly mobile, employees require the flexibility to access their inboxes regardless of where they may be. They need an integrated, seamless way to access their vital business communications. Exchange Server 2007 provides new communication and collaboration tools that align with the changing work habits of today's workforce, enabling the quick response times that are critical to business success:

Exchange Unified Messaging gives employees a single inbox where they can access all their important communications—including voice mail, faxes, and e-mail—and avoid the effort of maintaining separate systems.

Enhanced mobile device support delivers a familiar Outlook experience on an increasing number of mobile devices with no requirement for extra software or services other than an Internet connection.

Improved Outlook Web Access offers users the rich and familiar interface of Office Outlook 2007 from within a Web browser.

A new **Scheduling Assistant** streamlines meeting planning by visually presenting the best times for booking attendees, rooms, and resources.



Exchange Server 2007: Scheduling Assistant in Office Outlook 2007

TOP TEN REASONS TO UPGRADE TO EXCHANGE SERVER 2007

1. Keep your e-mail system running at a lower cost

New data replication capabilities in Exchange Server 2007 drive increased availability at a lower cost. Local Continuous Replication delivers database redundancy with rapid recovery, minimizing the frequency of full tape backups. With Cluster Continuous Replication in combination with Microsoft Cluster Service (MSCS), active/passive clusters provide both database and service redundancy without requiring expensive shared storage, even when clusters span geographic locations.

2. Access e-mail, voice mail, calendar, and contacts from virtually anywhere, anytime

In Exchange Server 2007, your employees can access their important inbox information from virtually anywhere using their desktop computer, laptop computer, a browser window from any Internet-connected computer, their mobile device, and even a basic telephone when no Internet connectivity is available. Employees enjoy a rich and familiar experience based on Microsoft Office Outlook 2007 functionality. Best of all, it's all built in with centralized management and robust security, making rich, virtually anywhere access possible for your entire workforce instead of just a limited few.

3. Get affordable, enterprise-class mobile messaging that's better than ever

Microsoft Exchange makes enterprise-class mobile messaging a reality by offering industry-leading scalability, native integration with compatible devices for lower total cost of ownership, and a variety of device options to suit today's business needs. Building on the advances in Exchange Server 2003 Service Pack 2, mobility features in Exchange Server 2007 raise the bar on user experience and deliver improved manageability. Now desktop features such as support for rich HTML, quick flags, sophisticated calendaring, and fast search are available on mobile devices. In addition, Exchange Server 2007 provides more granular security policies and enables users to perform basic tasks on their own (such as perform a remote wipe from Outlook Web Access 2007).

4. Empower employees with unified messaging while saving money

With new unified messaging in Exchange Server 2007, employees can receive their e-mail, voice mail, and faxes through a single inbox that can be accessed from anywhere. Employees can manage all of their messages in one place just as they manage e-mail today. For example, voice mail can be forwarded or, if the recipient adds text notes to the voice mail, messages can be found using built-in search. With Exchange Server 2007, you can deliver these features while lowering cost and complexity through consolidation of your voice mail infrastructure.

5. Get comprehensive protection from spam, viruses, and phishing attacks

Exchange Server 2007 provides integrated antivirus, anti-spam, and anti-phishing technologies to stop the latest threats before they impact your business and employees. Multi-pronged message filtering in the perimeter network is available through the Edge Transport server role. For customers who prefer to use a service, similar capabilities are provided "in the cloud" (as an Internet-based service) through Exchange Hosted Filtering*. Additionally, Forefront Security for Exchange Server* protects Exchange servers from viruses and worms by utilizing multiple antivirus engines simultaneously. To protect from evolving threats, filters are kept up-to-date with frequent and automatic updates.

**Exchange Hosted Filtering and Forefront Security for Exchange Server are included with the Exchange Server 2007 Enterprise CAL license.*

"Forefront Security for Exchange Server goes hand in hand with Exchange Server 2007. We wouldn't put anything else for e-mail security on our Exchange Server 2007 machines."

—Chris Habala, Senior Architect/Analyst, Del Monte

6. Reduce compliance risk in a way that makes sense for your business

Exchange Server 2007 incorporates features specifically designed to help your business comply with corporate, regulatory, and legal requirements. These features enable you to apply retention rules, scan and act on messages in transport, flexibly journal, and perform rich text searches across mailboxes in your organization. Exchange Server 2007 eases the toll often placed on administrators charged with applying and enforcing compliance policies, while avoiding adverse impact on employees and their productivity.

7. Take advantage of powerful Web access

Outlook Web Access (OWA) 2007 provides a rich, Office Outlook 2007–like experience in a browser and is great for use at home, at an airport kiosk, at an internet café, at a friend's house, or anywhere there is an Internet connection available. No VPN or network tunnel is required. OWA enhancements in 2007 include a new Scheduling Assistant to help employees efficiently book meetings, fast server-side search, integrated unified messaging, and new features to access documents and attachments more easily from outside the office. With two-factor authentication support and attachment viewing in HTML format, OWA also offers enhanced security compared with previous versions.

8. Boost administrator productivity with new tools

Exchange Server 2007 helps administrators save time and reduce effort with advanced management tools. A new command line interface gives administrators complete, fine-grained control over Exchange Server 2007 objects as well as the power to easily automate all types of operations with scripts. In addition, the graphical management console has been completely updated, with a more intuitive user interface, improved discoverability, and a toolbox work center that integrates diagnostics, monitoring, and troubleshooting tools including Exchange Best Practices Analyzer and the Exchange Troubleshooting Assistant.

9. Ease deployment and management

Deploying Exchange Server 2007 has never been easier. Exchange Server 2007 has a modern, modular architecture based on server roles. The server role concept is integrated into setup and deployment, helping to eliminate potential errors resulting from manual configuration, reducing the surface area for malicious attacks, and simplifying day-to-day management. Server roles are not tied to particular hardware configurations; they can be deployed on one server machine or many.** The new Autodiscover feature further eases deployment—by creating an automatic connection between Exchange Server 2007 and Office Outlook 2007 clients where no special scripts or complex user intervention is required.

***The exception is the Edge Transport role, which is intentionally designed to reside by itself in the perimeter network.*

10. Optimize your investment for future growth

As a native 64-bit application, Exchange Server 2007 breaks through past memory and cache limitations for higher performance and increased scalability even as mailbox sizes grow to accommodate employees' demands for more storage. The resulting reduction in input/output (I/O) increases storage utilization so you can optimize existing storage investments or consider lower cost storage options.

EXCHANGE SERVER 2007 EDITIONS

Exchange Server 2007 is offered in two server editions: **Standard Edition** and **Enterprise Edition**.

Exchange Server 2007 Standard Edition is designed to meet the messaging and collaboration needs of small and medium corporations; it may also be appropriate for specific server roles or branch offices.

Exchange Server 2007 Enterprise Edition, designed for large enterprise corporations, enables creation of multiple storage groups and databases.

Microsoft® Exchange Server 2007 Standard Edition

Microsoft® Exchange Server 2007 Enterprise Edition

Exchange Server 2007 Edition Offerings		
Feature	Standard Edition	Enterprise Edition
Storage Group Support	5 storage groups	50 storage groups
Database Support	5 databases	50 databases
Database Storage Limit	No software storage limit; storage limit is hardware dependent	No software storage limit; storage limit is hardware dependent
Single Copy Clusters	Not supported	Supported
Local Continuous Replication	Supported	Supported
Cluster Continuous Replication	Not supported	Supported

"The innovative breakthrough presented by local continuous replication technology in Exchange Server 2007 greatly reduces our costs of data backup and recovery.... With this technology's unique ability to recover data from different disks on the same server, we can wean ourselves from costly data storage solutions."

—Sun Xiao Qing, Information Management Manager
Executive Management Center, TCL Corporation

EXCHANGE SERVER 2007 CLIENT ACCESS LICENSES

Exchange Server 2007 is offered in two client access license (CAL) editions: Standard CAL and Enterprise CAL.

The **Exchange Server Standard CAL** provides access to e-mail, shared calendaring, and Outlook Web Access (OWA). In addition you will get advancements that reduce the cost and complexity of the messaging system by giving IT administrators the messaging protection their company demands, the virtually anywhere access their end users want, and the reliability they need.

The **Exchange Server Enterprise CAL** is an additive CAL and requires that a Standard CAL is also purchased for each user or device. The Exchange Server Enterprise CAL provides access to Unified Messaging and advanced compliance, as well as Forefront Security for Exchange Server and Exchange Hosted Filtering for on-site and hosted antivirus and anti-spam protection.

A CAL is required for each user or device (depending on the license) accessing the server. Either version of the CAL may be run against either version of the server.

The table below illustrates what features are included with the Exchange Server Standard CAL and Exchange Server Enterprise CAL. The last column illustrates what features can be accessed if you own both the Exchange Server Standard CAL and the Exchange Server Enterprise CAL.

Key: ✔ = Feature included ✗ = Feature not included

Exchange Server 2007 CAL Offerings			
Feature	Standard CAL	Enterprise CAL*	Standard CAL + Enterprise CAL
E-mail, shared calendaring, contacts, tasks, management	✔	✗	✔
Outlook Web Access	✔	✗	✔
Exchange ActiveSync	✔	✗	✔
Unified Messaging	✗	✔	✔
Per-user/Per-distribution List Journaling	✗	✔	✔
Managed E-mail Folders	✗	✔	✔
Exchange Hosted Filtering**	✗	✔	✔
Forefront Security for Exchange Server**	✗	✔	✔

**Additive CAL, purchase of the Standard CAL is required for Standard offerings*

***Offered only through Volume Licensing Programs, not available via retail purchase*

For information on pricing and licensing, go to:
www.microsoft.com/exchange/howtobuy/default.mspx

Learn More

Exchange Server 2007 Web Site:
www.microsoft.com/exchange

Exchange Server TechCenter:
www.microsoft.com/technet/prodtechnol/exchange/default.mspx

Exchange Server 2007 System Requirements:
www.microsoft.com/exchange/evaluation/sysreqs/default.mspx

Exchange Product Team Blog:
www.msexchangeteam.com/

[1]Anywhere access requires Internet connectivity.

[2] Exchange Hosted Filtering and Forefront Security for Exchange Server are both available with the Exchange Server 2007 Enterprise Client Access License.

[3]Outlook Voice Access requires phone connectivity.

[4]Hosted Email 2005-2009 Study from Radicati Group, 2005

[5]Workplace Email, Instant Messaging & Blogging Survey, AMA & The ePolicy Institute, 2006

[6]Mobile Data and the Enterprise Consumer: Assessing and Managing Corporate Data on Personal Devices, Jupiter Research, June 15, 2005

Microsoft® Exchange Server 2007

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